



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,314	08/10/2001	Christopher R. Risucci	1778.0180000	4782
26111	7590	11/17/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			TSAI, HENRY	
			ART UNIT	PAPER NUMBER
			2183	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,314

Applicant(s)

RISUCCI, CHRISTOPHER R.

Examiner

Henry W.H. Tsai

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/7/04.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,8,10,15 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2,4-7,9,11-14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>9/7/04</u> . | 6) <input type="checkbox"/> Other: |

Art Unit: 2183

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 3, 10, 18, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3, 10, and 18, it is not clear how an address can be transformed into an instruction since an address and an instruction represent different information. Some steps or details are missing.

In claim 19, it is not clear how an instruction can be transformed into an address since an address and an instruction represent different information. Some steps or details are missing.

Applicant is required to review the claims and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

Art Unit: 2183

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 8, 10, 15, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Revilla et al. (U.S. Patent Application Publication No. 2002/0144041), herein referred to as Revilla et al.'041.

Referring to claims 1, 8, and 15, Revilla et al.'041 discloses as claimed a method for generating at least one instruction for execution by a central processing unit (execution unit 4, see Fig. 2), the method comprising the steps of: receiving a misaligned instruction address (see page 1, paragraph 0014, lines 5-8, regarding "the control unit 5 may detect if an instruction is improperly aligned in memory"). Note the misaligned address is read from the (program counter in the

Art Unit: 2183

as Revilla et al.'041's system); causing an exception in response to said misaligned instruction address (see page 2, paragraph 0024, lines 1-4, regarding the control unit 5 may generate the exception status information due to such as misaligned addresses); and executing, in response to said exception, an exception handling routine (inherently existing in such as the exception handling logic 9 of the Revilla et al.'041's system), said routine transforming data (see page 1, paragraph 0012, lines 1-6, regarding the exception handling logic 9 processing (transforming) the exception status information (data) on parallel with execution of the instruction in the execution unit 4) into at least one instruction (the instruction is best broadly and reasonably interpreted as the instruction passing from exception handling logic 9 to instruction alignment unit 8 in Fig. 1, or the micro instruction passing to execution unit 4 internally) for execution by the central processing unit (execution unit 4, see Fig. 2).

Referring to claim 20, Revilla et al.'041 discloses as claimed, as best understood, a computer system (comprising 2, see Fig. 1), comprising: a processor (2, see Fig. 1); a memory (inherently existing in the Revilla et al.'041's system see Fig. 1), coupled to said processor; and sequences of instructions (inherently existing in the memory of the Revilla et al.'041's

Art Unit: 2183

system see Figs. 1 and 4) stored in said memory which when executed by said processor cause said processor to: receive a misaligned instruction address (see page 1, paragraph 0014, lines 5-8, regarding "the control unit 5 may detect if an instruction is improperly aligned in memory". Note the misaligned address is read from the (program counter in the as Revilla et al.'041's system); execute an exception in response to said misaligned instruction address (see page 2, paragraph 0024, lines 1-4, regarding the control unit 5 may generate the exception status information due to such as misaligned addresses); and transform data stored in said memory (see page 1, paragraph 0012, lines 1-6, regarding the exception handling logic 9 processing (transforming) the exception status information (data, from memory, see Fig. 4) on parallel with execution of the instruction in the execution unit 4) into valid processor instructions (the instruction is best broadly and reasonably interpreted as the instruction passing from exception handling logic 9 to instruction alignment unit 8 in Fig. 1, or the micro instruction passing to execution unit 4 internally) in response to said exception.

As to claims 3, and 10, Revilla et al.'041 also discloses, as best understood, transforming said misaligned instruction address (the instruction to cause the exception due to

Art Unit: 2183

misaligned address, see also page 1, paragraph 0014, lines 5-8,
regarding "the control unit 5 may detect if an instruction is
improperly aligned in memory") into said at least one ins (the
instruction is best broadly and reasonably interpreted as the
instruction passing from exception handling logic 9 to
instruction alignment unit 8 in Fig. 1, or the micro instruction
passing to execution unit 4 internally).

As to claim 18, Revilla et al.'041 also discloses, as best understood, means for transforming said misaligned instruction address (the instruction to cause the exception due to
misaligned address, see also page 1, paragraph 0014, lines 5-8,
regarding "the control unit 5 may detect if an instruction is
improperly aligned in memory") into said at least one ins (the
instruction is best broadly and reasonably interpreted as the
instruction passing from exception handling logic 9 to
instruction alignment unit 8 in Fig. 1, or the micro instruction
passing to execution unit 4 internally).

As to claim 19, Revilla et al.'041 also discloses, as best understood, means for transforming said misaligned instruction (the instruction to cause the exception due to misaligned
address, see also page 1, paragraph 0014, lines 5-8, regarding
"the control unit 5 may detect if an instruction is improperly
aligned in memory") into a memory address and for using said

Art Unit: 2183

memory address to fetch said at least one instruction (the instruction is best broadly and reasonably interpreted as the instruction passing from exception handling logic 9 to instruction alignment unit 8 in Fig. 1, or the micro instruction passing to execution unit 4 internally) from memory.

Allowable Subject Matter

4. Claims 2, 4-7, 9, 11-14, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2183

Response to Amendment

5. Applicant's arguments filed 9/3/04 have been fully considered but they are not deemed to be persuasive.

Regarding 35 U.S.C. 112, second paragraph rejections to claims 3, 10, 18, and 19, Applicants described the detailed data transformation in the specification. However, the claim language in the claims is still not understandable and indefinite.

Applicants argue that "The present invention operates by "transforming data into at least one instruction" that can be executed by a processor. This claimed feature of the present invention, recited in amended independent claim 1, 8, and 15, is neither disclosed or suggested by Revilla"; and "Revilla does not disclose or suggest at least the "transformation data" feature of the present invention recited in claim 20 ".

Examiner disagrees with Applicants. As set forth in the art rejections, Revilla et al.'041 discloses: transforming data (see page 1, paragraph 0012, lines 1-6, regarding the exception handling logic 9 processing (transforming) the exception status information (data) on parallel with execution of the instruction in the execution unit 4) into at least one instruction (the instruction is best broadly and reasonably interpreted as the

instruction passing from exception handling logic 9 to instruction alignment unit 8 in Fig. 1, or the micro instruction passing to execution unit 4 internally).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

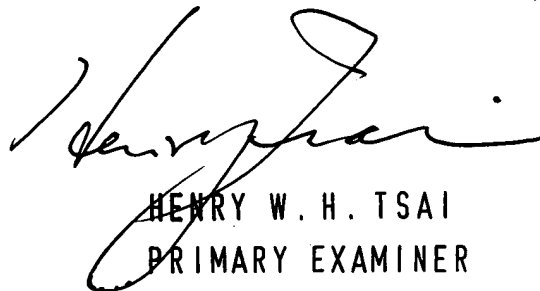
Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry

Art Unit: 2183

Tsai whose telephone number is (571) 272-4176. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Eddie Chan, can be reached on (571) 272-4162. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC central telephone number, (571) 272-2100.

8. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into the Group at fax number: 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.



HENRY W. H. TSAI
PRIMARY EXAMINER

November 15, 2004